## HARFORD COUNTY DEPARTMENT OF PUBLIC WORKS-DIVISION OF HIGHWAYS AND WATER RESOURCES

## Forest Hill & Hickory Elementary School Bioretention Retrofit

Harford County, Maryland



Biohabitats performed low impact development (LID) assessment and design for bioretention retrofits at Hickory and Forest Hill Elementary Schools. These projects were the first bioretention retrofits completed for the Harford County Public Schools and serve as

a model for future efforts in the school system. Teh retrofit designs provide on-site water quality treatment while considering educational value and safety issues. They also contribute to the County's pollutant loading reduction goals and watershed restoration objectives. By implementing its first bioretention retrofit, a county school system improves water quality, enhances educational opportunities, and sets the stage for future LID retrofits.

Biohabitats began by assessing LID retrofit opportunities to treat impervious areas of both schools. After the sites for final design were selected, Biohabitats performed hydrologic and hydraulic analysis, developed construction plans, and produced an engineer's cost estimate for a bioretention cell retrofit in an existing parking lot island at Forest Hill Elementary School.

This project provided water quality treatment and safe conveyance of runoff from 0.3 acres of previously untreated parking lot. Biohabitats also developed inspection and maintenance guidance for the overall project and produced planting plans all three retrofit

designs. Providing a unique outreach component to this project, Biohabitats staff visited fourth graders at Forest Hill and taught them about the importance of native plants, the benefits of bioretention.

Once constructed, the retrofit was celebrated with a dedication ceremony attended by students, faculty, County staff and officials, and Biohabitats staff.

The project received a 2011 Top Stormwater and Erosion Control Project award by Storm Water Solutions Magazine.

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